

Notice of Allowability

Application No.

09/619,479

Examiner

Timothy L. Rude

Applicant(s)

YAMAZAKI ET AL.

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2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to response filed 08 September 2006.
2. ☒ The allowed claim(s) is/are 10,11,21,22 and 74-83.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

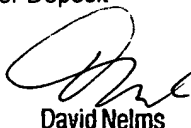
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____



David Nelms
Supervisory Patent Examiner
Technology Center 2800

tlr

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of species A in the reply filed on 02 May 2006 is acknowledged.

Claims 1-9, 12-20, 29-34, and 38-73 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 02 May 2006.

Claims

Claims 11 and 22 are amended. Claims 74-83 are added. This application is in condition for allowance except for the presence of claims 1-9, 12-20, 29-34, and 38-73 directed to species non-elected without traverse. Accordingly, claims 1-9, 12-20, 29-34, and 38-73 have been cancelled.

Allowable Subject Matter

Claims 10, 11, 21, 22, and 74-83 are allowed.

The following is an examiner's statement of reasons for allowance:

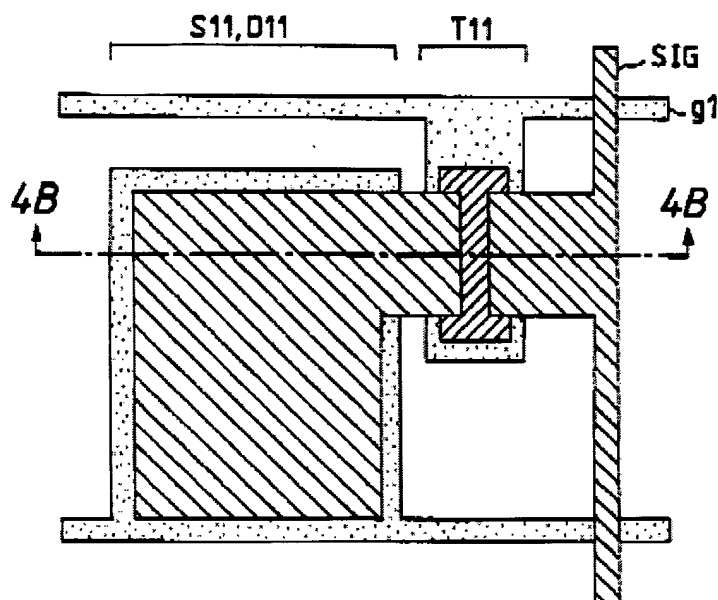
As to claims 10, 21, 74, and 76, relevant prior art of record did not disclose, alone or in combination, a device as claimed comprising: *"an insulation film provided over said upper electrode; and a pixel electrode provided over said insulation film; wherein said pixel electrode overlaps with said upper electrode with said insulation film therebetween to provide a capacitance."*

The closest reference is Kaifu et al (Kaifu) USPAT 5,812,109.

Kaifu discloses an embodiment (col. 14, line 53 through col. 17, line 13) that is explained in part by Figures 3, 4A, and 4B, (col. 5, line 26 through col. 14, line 52) wherein an integral image recognition/display apparatus comprises: a plurality of pixel portions, (everything in Figure 4A), each having an active device, T11, and arranged in matrix and each having a pixel electrode (left portion in Figure 4B), comprising 10,000 angstrom thick layer of aluminum (Applicant's a reflecting material), 6, and n-doped silicon (Applicant's light-transmitting material), 5, (Applicant's pixel electrode comprises a first layer and a second layer, said second layer provided over said first layer, one of said first layer and said second layer comprising a reflecting material (10,000 angstrom thick layer of aluminum) and the other comprising light-transmitting material (n-doped silicon)) over an active matrix substrate, 1; and a plurality of sensor portions, S11, arranged in matrix over said active matrix substrate, wherein said sensor portion

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includes a photo-electric conversion device, 4, and can read information by utilizing the rays of light transmitting through said light-transmitting material when an external image is read (Abstract), wherein said photo-electric conversion device, 4, overlaps the TFT (Applicant's active device).

FIG. 4A

Note: the removal (col. 7, lines 12-22) of a portion of the aluminum electrode, 6, is not shown in Figures 4A and 4B. However, an illustration may be found in Figures 11A and 11B (Applicant's wherein a plane parallel to a direction of said matrix is divided into at least a first display region and a second display region in said pixel electrode, wherein said pixel electrode comprises a reflecting material, 6, in said first display region, and wherein said pixel electrode comprises a light-transmitting material, 5, in said second display region) (col. 14, line 53 through col. 17, line 13),

FIG. 11A

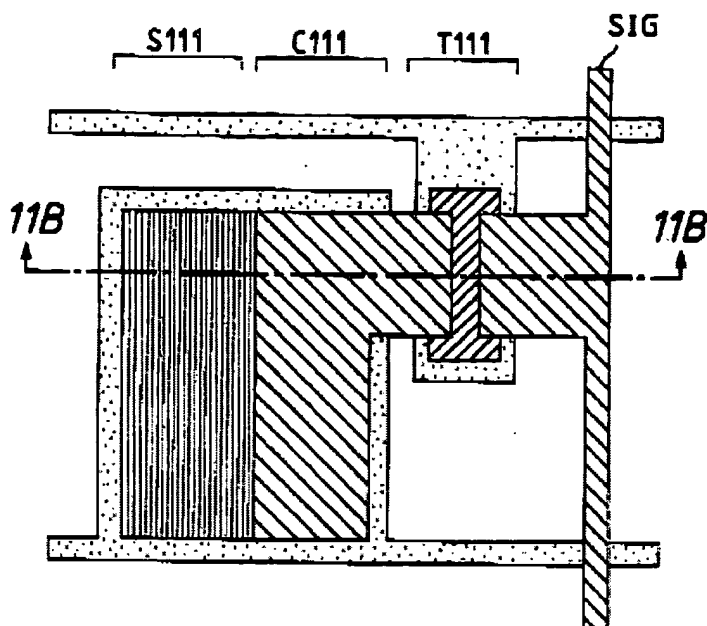
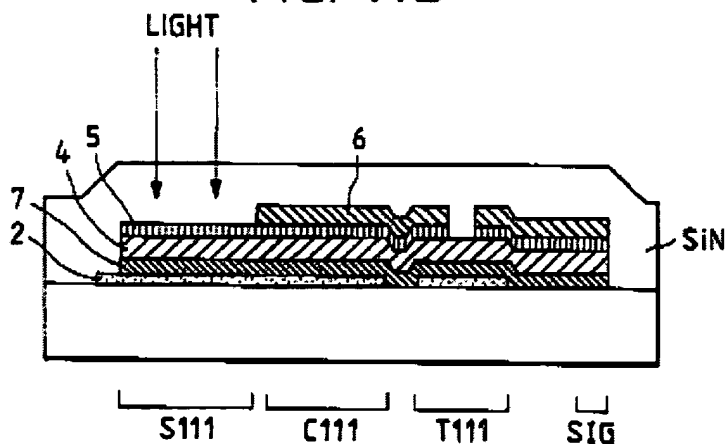


FIG. 11B



wherein said pixel electrode, 6, has an image display function (col. 11, line 66 through col. 12, line 10; see also incident light ray L2 and reflected light ray L3 in Figure 4B) and wherein said sensor portion has a photo-electric conversion device, 4, and at least a part of said photo-electric conversion device, 4, is extended in such a manner as

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to overlap with said active device, T11. Please note: the difference between the embodiment of Figure 11B and that of Figures 4B is 11B performs the image input and display on the top side as opposed to 4B performing the image input on the bottom side and the image display on the top side. Please also note: in Figure 11B pixel electrode, 6, is energized for image display which also necessarily energizes transparent n-type silicon structure, 5, that functions as a transparent pixel electrode in the display mode.

However, Kaifu does not disclose a pixel electrode separated from the upper electrode by an insulating film. No reference was found with proper motivation to combine that would result in meeting all the above limitations.

As to claims 11, 22, 75, and 77-83, they are directly or indirectly dependant upon claims with allowable subject matter above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L. Rude whose telephone number is (571) 272-2301. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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